

JUL/FY06

FORT SHERIDAN
Illinois

Base Realignment & Closure
Installation Action Plan

Public Version

Final 30 September 2006

Table of Contents

Table of Contents..... 1

Statement of Purpose..... 2

Acronyms and Abbreviations 3

Installation Information 5

Transfer Summary 11

Cleanup Program Summary..... 12

Installation Restoration Program..... 13

Summary..... 14

Contamination Assessment..... 15

BRAC Parcel and Site Descriptions 16

FTSH-05 Landfill #5 17

FTSH-06 Landfill #6 18

FTSH-07 Landfill #7 19

FTSH-08 Landfill #1 20

Schedule 25

Costs 27

Community Involvement 28

Statement of Purpose

The purpose of the Base Realignment and Closure (BRAC) Installation Action Plan (BIAP) is to outline the total multi-year Cleanup Program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation-wide approach, with associated costs and schedules, to conduct investigations, necessary remedial actions.

In an effort to coordinate planning information between the restoration manager, US Army Environmental Center (USAEC), Fort Sheridan, BRAC Division, executing agencies, and regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules and tentative budgets for all Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

The following persons contributed to the formulation and completion of this Installation Action Plan:

US Army Environmental Center
Engineering & Environment Inc. for AEC
Fort Sheridan

Acronyms & Abbreviations

AEDB-R	Army Environmental Database - Restoration
Ammo	ammunition
AOC	Area of Concern
AST	Aboveground Storage Tank
BEC	BRAC Environmental Coordinator
BIAP	BRAC Installation Action Plan
Bldg	Building
BRA	Baseline Risk Assessment
BRAC	Base Realignment and Closure
BTEX	Benzene, Toluene, Ethylbenzene, and Xylene
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
COC	Contaminant of Concern
CSA	Coal Storage Area
USACE	US Army Corps of Engineers
CRP	Community Relations Plan
CTC	Cost-to-Complete
DD	Decision Document
DERP	Defense Environmental Restoration Program
DES	Design
DoD	Department of Defense
ER,A	Environmental Restoration, Army
FFS	Focused Feasibility Study
FS	Feasibility Study
FTSH	Fort Sheridan (AEDB-R site designation)
FY	Fiscal Year
GFPR	Guaranteed Fixed-Price Remediation
GW	Groundwater
Haz Mat	Hazardous Material
IEPA	Illinois Environmental Protection Agency
IAP	Installation Action Plan
LF	Landfill
LRA	Local Redevelopment Authority
LTM	Long-Term Management
LTO	Long-Term Operation
LUC	Land Use Control
MW	Monitoring Well
NCP	National Oil & Hazardous Substances Pollution Contingency Plan
NFA	No Further Action
NPL	National Priorities List
O&M	Operations & Maintenance
OU	Operable Unit
PAH	Polyaromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
PP	Proposed Plan

Acronyms & Abbreviations

PY	Prior Year
RA	Remedial Action
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operation)
RAB	Restoration Advisory Board
RACER	Remedial Action Cost Engineering and Requirements
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RIP	Remedy in Place
SI	Site Inspection
SVOC	Semi-Volatile Organic Compound
SWMU	Solid Waste Management Unit
TAPP	Technical Assistance for Public Participation
TPH	Total Petroleum Hydrocarbons
TRC	Technical Review Committee
TSCA	Toxic Substances Control Act
USACE	US Army Corps of Engineers
USAEC	US Army Environmental Center
USAR	US Army Reserve
USEPA	US Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound

Installation Locale: Fort Sheridan encompasses 712 acres in Lake County, Illinois, along the western shore of Lake Michigan, approximately 25 miles north of Chicago, Illinois, and 18 miles south of the Wisconsin state line along the western shore of Lake Michigan.

Installation Size:

Installation Acreage: 709 acres

BRAC Acreage: 598 acres

Acreage being transferred to other service: 206 acres

Acreage being transferred to other federal agencies: 0 acres

Acreage being transferred to non-federal agencies: 392 acres

List of Off Post Properties: None

Environmental Condition of Property

Acres in Category 1: 316 acres

Acres in Category 2: 10 acres

Acres in Category 3: 59 acres

Acres in Category 4: 7 acres

Acres in Category 5: 0

Acres in Category 6: 0

Acres in Category 7: 0

Lead Organization:

Base Realignment and Closure (BRAC)

Lead Executing Agencies:

Investigation Phase: U.S. Army Atlanta Contracting Center

Remedial Action Phase: U.S. Army Atlanta Contracting Center

Regulator Participation:

Federal: US Environmental Protection Agency (USEPA) Region 5

State: Illinois Environmental Protection Agency (IEPA)

BRAC Closure Round: BRAC I - 1988

Installation Information

Status of Redevelopment Initiative (Reuse Plan): The Army has accepted the Fort Sheridan Local Redevelopment Authority (LRA) reuse plan.

Organization Name: Fort Sheridan Local Redevelopment Authority

Plan Status: Currently under implementation

Development Plan Date: 200106

Existing Legal Agreements/Interim Leases: KEMRONS' Lease

Significant Base Tenants: KEMRON Environmental Services

Projected Date of Final Transfer of Property: 200106

National Priorities List (NPL) Status: Not on NPL

Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status: A RAB was established at Fort Sheridan in January 1995

Installation Program Summaries

IRP

Primary Contaminants of Concern: Volatile Organic Compounds (VOC), Semivolatile Organic Compounds (SVOC), benzene, ethylbenzene, toluene and xylene (BTEX), pesticides

Affected Media of Concern: Soil, Groundwater

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 200109/200109

Funding to Date (up to FY05): \$ 56,666K

Current Year Funding (FY06): \$ 0

Cost-to-Complete (FY07+): \$ 13,469K

1987

- Update of the Initial Installation Assessment of Fort Sheridan, Illinois. ES&E, Inc., August

1989

- Enhanced Preliminary Assessment Report: Fort Sheridan, Illinois. Argonne National Laboratory, October

1990

- Installation Assessment Army Base Closure Program, Fort Sheridan, Lake County, Illinois. The Bionetics Corp., April
- Report of Sanitary Landfill Closure Site Inspection. Greeley and Hansen, June
- Final Environmental Impact Statement, Fort Sheridan, Illinois, Base Closure. USACE, August
- Final Report - Geophysical Survey at Fort Sheridan, Illinois. Technos, Inc., December

1991

- Target Chemical/Applicable or Relevant and Appropriate Requirements (ARARS), Determination Report, Fort Sheridan, Illinois, Draft. ES&E, Inc., June

1992

- Report of Findings for PCB Transformer Sampling Conducted at Fort Sheridan, Illinois. ES&E, Inc., June
- Draft Final Remedial Investigation (RI)/Risk Assessment (RA) Report Remedial Investigation/Feasibility Study Fort Sheridan, IL. ES&E, Inc., June
- Final Report of Asbestos Inspection and Survey, Fort Sheridan Garrison. ES&E, March

1993

- Environmental Assessment for the Disposal and Reuse of Fort Sheridan, Illinois, Final. Dept of the Army, September

1994

- Finding of Suitability to Lease Golf Course Parcel, Fort Sheridan, Illinois & Environmental Baseline Survey, Golf Course Parcels, Fort Sheridan Illinois. April
- Former Fort Sheridan Unexploded Ordnance Survey, Final Technical Report. IT Corp., July
- Fort Sheridan Concept Plan – Overview. Johnson, Johnson & Roy, Inc., September
- Shallow Groundwater Resource Classification, Fort Sheridan, Illinois. ES&E, Inc., October

1995

- Exploratory Trenching Report Landfills 6 and 7, Fort Sheridan, Illinois. ES&E, Inc., May
- Former Fort Sheridan Unexploded Ordnance Survey, Final Technical Report. IT Corp., July

- Final Report - Environmental Health Evaluation NO. 39-26-4044-95 - Outdoor Sampling, Landfill Number 7 - Fort Sheridan, Illinois - July-August 1995. CHPPM, August
- Updated Final: Community Relations Plan Fort Sheridan, Illinois. Dames & Moore, October
- Final Report Environmental Health Evaluation No. 39-26-4044-95 Outdoor Sampling Landfill Number 7 Fort Sheridan, Illinois July-August 1995. CHPPM, November

1996

- Groundwater Classification Document, Fort Sheridan, IL. ES&E, Inc., February
- Ordnance, Ammunition and Explosives Archives Search Report Findings for Fort Sheridan, Lake County, Illinois. USACE Louisville District, March
- Radiological Assessment & Survey at Fort Sheridan. IL Dept of Nuclear Safety, March
- Addendum Environmental Health Evaluation No. 39-26-4044-95 Indoor Air Quality Study and Odor Investigation Landfill Number 7, Fort Sheridan, Illinois July-August 1995. CHPPM, March
- Final Data Validation Report. ECG, Inc., April
- Final Sampling Results and Data Evaluation Report for Fort Sheridan Golf Course Fort Sheridan, Illinois. ES&E, Inc., April
- Fort Sheridan, Landfills 6 and 7 Interim Action, Final Feasibility Study. ES&E, Inc., July
- Industrial Radiation Survey No. 27-MH-2859-R1-96 Facility Close-Out and Termination Survey, Fort Sheridan, Illinois. USACHPPM, August
- Fort Sheridan Base Realignment and Closure Proposed Plan Landfills 6 and 7 Interim Action. August

1997

- Phase II-RI/FS DoD OU – Technical Plan. SAIC, January
- Final Removal Report, Ordnance & Explosives (OE) Interim Removal and Sampling Action Fort Sheridan, Illinois. Human Factors Applications, Inc., March
- Final Data Validation Report #1. ECG, Inc. April
- Final Background Sampling and Data Evaluation Report, Fort Sheridan. ES&E, Inc., May
- Final Data Validation Report #2. ECG, Inc. May
- Final Data Validation Report #3. ECG, Inc. June
- Phase II RI/FS DoD OU – Technical Plan Addendum. SAIC, June
- Final Data Validation Report #4. ECG, Inc. July
- Final Remedial Investigation/Baseline Risk Assessment for the Landfills 3 and 4 Operable Unit, Fort Sheridan, Illinois. QST Environmental, Inc., July
- Final, Decision Document for Landfills 3 and 4 Operable Unit, Fort Sheridan, Illinois. QST Environmental, Inc., October
- Final Technical Memorandum for Miscellaneous Surplus OU Study Areas, Fort Sheridan, Illinois. USAEC, November
- Engineering Evaluation/Cost Analysis, Coal Storage Area 3, B42, B43, B77 for Fort Sheridan, Illinois. LAW Engineering and Environmental, Inc., November

- Verification Sampling Results, Surplus Operable Unit, Fort Sheridan, Illinois. SAIC, November

1998

- Chemical Analytical Data Background Sampling Locations, Fort Sheridan. QST Environmental, Inc., January
- Chemical Analytical Data Asphaltic Background Sampling Locations, Fort Sheridan. QST Environmental, Inc., January
- Final Remedial Investigation/Baseline Risk Assessment for the Ravines and Beach Study Areas of the Surplus Operable Unit, Fort Sheridan, Illinois. QST Environmental, Inc., April
- Final Removal Report, Ordnance, Ammunition & Explosives Time Critical Removal Action, Fort Sheridan, Illinois Fort Sheridan. USACE Louisville District, May
- Final, Proposed Remedial Action Plan for Ravines and Beach Study Areas of the Surplus Operable Unit, Fort Sheridan, Illinois. QST Environmental, Inc., June
- Follow On Investigation Report for the Building 172 Study Area of the Surplus Operable Unit, Fort Sheridan, Illinois. QST Environmental, Inc., October
- Final Decision Document for Ravines and Beach Study Areas, Surplus Operable Unit, Fort Sheridan, Illinois. QST Environmental, Inc., October
- Final Data Validation Report #5. ECG, Inc. December

1999

- Final Remedial Investigation/Baseline Risk Assessment for the LF2/SARN/38-Acre Parcel Fill Area of the Surplus Operable Unit, Fort Sheridan, Illinois. QST Environmental, Inc., January
- Final Proposed Remedial Investigation/Baseline Risk Assessment for the LF2/SARN/38-Acre Parcel Fill Area of the Surplus Operable Unit, Fort Sheridan, Illinois. QST Environmental, Inc., March
- Final Post Removal Action Risk Evaluation for Building 42, Building 43, Coal Storage Area 3, and Building 77 of the Surplus Operable Unit for Fort Sheridan, Illinois. QST Environmental, Inc., June
- Final Decision Document for the LF2/SARN/38-Acre Parcel Fill Area, Study Areas of the Surplus Operable Unit, Fort Sheridan, Illinois. QST Environmental, Inc., June
- Non-Time Critical Removal Action Completion Report Building 42, Building 43, Building 77 and Coal Storage Area 3, Fort Sheridan, Illinois. Harding Lawson Assoc., June
- Final Remedial Investigation/Baseline Risk Assessment Report, DoD Operable Unit, Fort Sheridan, Illinois. SAIC, July
- Final Site Investigation Report for the Coal Storage Area Annex Study Area, Surplus Operable Unit, Fort Sheridan, Illinois. ES&E, Inc., August
- Fort Sheridan Community Assessment. Equinox Environmental Consultants, September
- Final Post Removal Action Risk Evaluation for the Coal Storage Area Annex Study Area of the Surplus Operable Unit, Fort Sheridan, Illinois. ES&E, Inc., November
- Final Non-Time Critical Removal Action Completion Report Addendum Coal Storage Area Annex Fort Sheridan, Illinois. IT Corp., November

2000

- Phase III Technical Plan Addendum, Remedial Investigation/Baseline Risk Assessment Report, Fort Sheridan, Illinois. SAIC, May

2001

- Final Anti-Aircraft Artillery Ranges, Site Investigation Report, Surplus Operable Unit, Fort Sheridan, Illinois. Harding ESE, March
- Remedial Investigation/Baseline Risk Assessment Report Addendum, DoD Operable Unit, Fort Sheridan, Illinois. SAIC, April

2002

- Fort Sheridan Feasibility Study, DOD Operable Unit, Fort Sheridan, Illinois, Final. SAIC, May
- Storm Water Pollution Prevention Plan for Construction Activities at the Fort Sheridan Base. Kemron, July
- Waste Minimization Plan for Environmental Restoration Project, Fort Sheridan, Illinois. Kemron, July
- Community Involvement Plan for Environmental Restoration Project, Fort Sheridan, Illinois Final. Kemron, July
- Remedial Investigation/Baseline Risk Assessment Technical Memorandum, DoD Operable Unit, Fort Sheridan, Illinois. SAIC, September
- Memorandum of Agreement Between the Illinois Environmental Protection Agency, the U.S. Environmental Protection Agency, and the U.S. Department of the Navy. September

2003

- U.S. Army Closed, Transferring and Transferred Range and Site Inventory for Fort Sheridan BRAC Property, Illinois, Final. URS Group, Inc., March
- Archived Search Report Analysis of Janes Ravine – Fort Sheridan, Lake Forest, IL. USACE Louisville District, March
- Defense Department Operable Unit, 100% Data Review Report, Final. Versar, July
- Archive Search Fort Sheridan Nike Missile Site (C-98) Lake County, Illinois. USACE Louisville District, October

2004

- Storm Water Pollution Prevention Plan for Construction Activities at the Fort Sheridan Base, Revised. Kemron, January
- Decision Document No. 01-13-04, Fort Sheridan, Illinois, Base Realignment and Closure Team, State of Basis/Final Decision for Final Remedial Actions at Landfills 5 and 1. Kemron, February
- Proposed Plan Landfill 1, Final. Kemron, February

Total Installation Acres: 709 acres

BRAC Acres: 598 acres

Parcel Name: Surplus Operable Unit
Recipient organization: Fort Sheridan LRA
Acres: 352
Transfer strategy: Special Legislation
Current land use: Industrial, Commercial
Future land use: Industrial, Commercial
Transfer date: 200106

Parcel Name: Surplus Operable Unit
Recipient organization: DoD
Acres: 206
Transfer strategy: Special Legislation
Current land use: Industrial, Commercial
Future land use: Industrial, Commercial
Transfer date: 199401

Parcel Name: Surplus Operable Unit
Recipient organization: Lake Forest Preserve District
Acres: 40
Transfer strategy: Special Legislation
Current land use: Other
Future land use: Other
Transfer date: 200104

Cleanup Program Summary

Installation Historic Activity:

Before military development, the land currently occupied by Fort Sheridan was operated as a manufacturing center and lake shipping port between the 1840s and 1860s. The town of St. Johns was developed in the mid-1840s, with extensive ship piers and heavy industry including logging, lumbering, leather tanning, quarrying, brick-making, iron-casting, real estate development, and shipping enterprises. The deed for the property that was to become Fort Sheridan was recorded on October 6, 1887, and the first troops arrived at the property (known as Camp Highwood) in November 1887. The Fort operated between 1887 and 1993. It provided garrison and training facilities for Army troops participating in the Spanish-American War (1898), the Mexican Intervention of 1913, World War I (1917), and World War II (1940), and was established as a Nike missile launch site in the 1950s. Training activities in preparation for World War I included extensive construction of mock combat trenches over a large area of the southern portion of Fort Sheridan. Before and during World War II, Fort Sheridan was a center of anti-aircraft and coastal artillery training and served as a recruit reception center. Three artillery batteries were established along the shoreline of Lake Michigan.

Between the 1950s and 1974, Fort Sheridan functioned not only as a Nike missile launch area in the Chicago defense network, but also as a maintenance and service center for Nike operations for several Midwestern metropolitan areas. Between 1967 and 1993, operations at Fort Sheridan were primarily administrative, with the Fort serving alternately as headquarters for the Fifth Army, the Army Recruiting Command, and the Fourth Army, and providing administrative and logistical support to 74 Army Reserve centers in Midwestern states from Minnesota to Michigan.

IRP

- Prior Year Progress: In FY 05 completed the Operation and Maintenance (O&M) and groundwater monitoring plans for Landfills 6 and 7 and implemented the O&M plan. Completed Decision Document (DD) and its implementation for Coal Storage Area (CSA) 3 and Landfill 5. Prepared removal action completion reports for CSA 4, Vehicle Storage Area (VES) 8, Building 70 and former water tower.
- Future Plan of Action: Complete No Further Action (NFA) DD for Bartlett Ravine, Van Home Ravine, Shenck Ravine, Excavation Area 8, Beach Pistol/Machine Gun Range, Wells Ravine Northern Tributary and Wells Ravine Western Extension. Complete Proposed Plan (PP) and DD for Landfills 6 and 7. Implement groundwater monitoring plan for Landfills 5, 6 and 7. Complete removal action completion report for CSA 3 and Landfills 5, 6 and 7.

FORT SHERIDAN

Installation Restoration Program

Total AEDB-R IRP Sites/AEDB-R sites with Response Complete: 77/73

Different Site Types:

2 Above Ground Storage Tanks	2 Chemical Disposals
6 Contaminated Buildings	1 Disposal Pit/Dry Well
1 Explosive Ordnance Disposal Area	2 Firing Ranges
1 Incinerator	1 Industrial Discharge
9 Landfills	1 Leach Field
6 Maintenance Yards	1 Oil Water Separator
1 Pesticide Shop	1 Pistol Range
1 Sewage Effluent Settling Pond	1 Small Arms Range
1 Soil Contamination Tank Removal	2 Spill Site Areas
18 Storage Areas	9 Storm Drains
2 Surface Disposal Area	2 Surface Runoff
2 Underground Storage Tanks	4 Unexploded Munitions/Ordnance

Most Widespread Contaminants of Concern: Volatile Organic Compounds (VOC), Semivolatile Organic Compounds (SVOC), benzene, ethylbenzene, toluene and xylene (BTEX), pesticides

Media of Concern: Soil and Groundwater

Completed Removal (REM)/Interim Remedial Action (IRA)/Remedial Action (RA):

1991 – FTSH 10 Base-wide UST removal \$
 1995 – FTSH 13 Building 43 Soil removal \$
 FTSH 84 Soil removal for lead based paint (LBP) \$
 1996 – FTSH 71 Building 42 Soil removal \$
 1999 – FTSH 53 CSA 3 Soil removal \$
 2001 – FTSH 11 Incinerator Soil removal \$
 FTSH 51 VES 8 Soil removal \$
 FTSH 54 CSA 4 Soil removal \$
 FTSH 95 Water Tower Soil removal \$

Total IRP Funding

Prior Years (up to FY05):	\$ 56,666K
Current Year Funding (FY06):	\$ 0K
Future Requirements (FY07+):	\$ 13,469K
Total:	\$ 70,135K

Duration of IRP

Year of IRP Inception: 1989
 Year of IRP RIP/RC: 2001
 Year of IRP Completion including Long-Term Management (LTM): 2041

IRP Contamination Assessment

IRP Contamination Assessment Overview

The Installation Restoration Program was initiated in 1989 at Fort Sheridan in compliance with the Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA) along with the Department of Defense's Management Guidance for the Defense Environmental Restoration Program (DERP) (March 1998).

In 2001 the Army awarded a Guaranteed Fixed-Price Remediation Contract (GFPR) to Kemron Environmental Services to bring a total of eight sites to RIP/RC.

Of the 77 AEDB-R sites at Fort Sheridan all but four are at Response Complete. Of the four sites three will be moving into the long term maintenance (LTM) phase. The remaining site, Landfill 1, has been delayed due to a non-concurrence determination by the U.S. Army Environmental Center (USAEC) over the proposed remedy. Landfill 1 occupies land both on and off the DoD OU. The proposed remedy includes the excavation and off site disposal of that portion of the landfill located on the City of Lake Forest property and capping the on site portion. The USAEC non-concurrence relates to the off site remedy as the removal action is not commensurate with the apparent human health risk associated with the landfill content. Should the off site remedy be changed from its current plan, the new plan will have to be negotiated with the IEPA as well as reintroduced to the public through a new Proposed Plan and public review/comment period. The USAEC and BRAC office are working together to resolve the issue.

IRP Cleanup Exit Strategy

With the exception of Landfill 1 all remedial actions have been executed at Fort Sheridan. For Landfills 5, 6 and 7 and CSA 3, the necessary completion reports will be completed and implementation of LTM will commence. The Final Decision Document for Landfills 6 and 7 will be prepared and will go through the public comment period. A No Further Action (NFA) Decision Document will be prepared for Bartlett Ravine, Van Horne Ravine, Shenck Ravine, Excavation Area 8, Beach Pistol/Machine Gun Range, and Wells Ravine Western Exposure.

In the out-years of the LTM, the Army will petition the IEPA to reduce the frequency of monitoring along with the constituents analyzed based on the lack of detection over time.

FORT SHERIDAN

Installation Restoration Program Site Descriptions

FTSH-05 Landfill # 5

SITE DESCRIPTION

Landfill 5 covers roughly three acres and is located within the DoD OU in a north-south trending tributary of Bartlett Ravine through the area west of Building 378. It is located in a light industrial area surrounded by warehouse facilities and storage areas. Most of the site is covered by concrete and asphalt paving associated with buildings, parking areas, and roads. The landfill site is located in an area that is currently used for vehicle and equipment storage and shop activities.

The Remedial Investigation/Baseline Risk Assessment (RI/BRA) (FY99) for Landfill 5 indicated that soil and waste within the landfill are contaminated with lead and PAHs. Levels of PAHs and lead were determined to pose a risk to future residential and recreational land users through direct contact or ingestion of the landfill contents. The Guaranteed Fixed Price Remediation (GFPR) contractor completed the DD and remedial design in FY05 to include the construction of a geomembrane and clay cover over the landfill. Additionally, Land Use Controls (LUCs) and groundwater monitoring will be implemented. Cap construction was completed in FY05.

Construction activities are completed and contractor is preparing the Completion Report.

CLEANUP STRATEGY

Complete the Construction Completion report in FY07 and continue LTM. The Army will be responsible for all LTM costs beyond the GFPR contract (to begin in FY10).

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Low

CONTAMINANTS OF CONCERN:
Metals and PAHs

MEDIA OF CONCERN: Soil,
Groundwater

Phases	Start	End
PA	198905	198910
RI/FS	198911	200109
RA(C)	200101	200109
LTM	201008	203508

RC DATE: 200109

FTSH-06 Landfill # 6

SITE DESCRIPTION

Landfill 6, located in the southern portion of Fort Sheridan, encompasses approximately 3.3 acres, including the former Wells Ravine area between Patten Road and H Street. A Focused Feasibility Study (FFS) was completed in 1996 followed by the Interim DD in 1997. The Interim DD outlined the construction of a modified Resource Conservation and Recovery Act (RCRA) cap leachate collection system and landfill gas collection/treatment system to be placed over Landfills 6 and 7.

In 2002 the 100% Design was finalized along with the Feasibility Study for the DoD OU. Cap construction began in 2004 and completed in 2004. In 2004 the Construction Quality Assurance Final Report was submitted. All construction activities have been completed including installation of the groundwater monitoring network. The landfill is currently in the LTM phase.

The GFPR contractor is currently preparing a NFA PP and DD as the final remedy.

CLEANUP STRATEGY

Complete the NFA PP and DD. Continue LTM.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Low

CONTAMINANTS OF CONCERN:
VOCs, Metals

MEDIA OF CONCERN: Soil,
Groundwater

Phases	Start	End
PA	198905	198910
RI/FS	198911	200109
RA(C)	200103	200109
LTM	201008	204008

RC DATE: 200109

FTSH-07 Landfill # 7

SITE DESCRIPTION

Landfill 7 is located over the eastern portion of the former Wells Ravine between Patten Road and Lake Michigan and encompasses approximately 7.7 acres. Fort Sheridan applied for and received a Landfill Development Permit (No. 1979-15-DE) for Landfill 7 in 1979, and an Operating Permit (No. 1979-15-OP) was issued by the Illinois EPA in 1980. The landfill underwent a closure between 1980 and 1982 that consisted of the installation of a landfill cap, gas vents, installation of a surface drainage system, manhole rehabilitation and a leachate collection system. The east slope of the landfill was terraced and up to 40 feet of material was removed from the slope. The 1980 closure of Landfill 7 was not accepted by Illinois EPA as complying with the State closure requirements, due to continued State concerns related to leachate seeps, lack of documentation regarding construction, and groundwater and surface water monitoring results.

In 2002 the 100% Design was finalized along with the Feasibility Study for the DoD OU. Cap construction began in 2004 and completed in 2004. In 2004 the Construction Quality Assurance Final Report was submitted. All construction activities have been completed including installation of the groundwater monitoring network. The landfill is currently in the LTM phase.

The GFPR contractor is currently preparing a NFA PP and DD as the final remedy.

CLEANUP STRATEGY

Complete the NFA PP and DD. Continue LTM.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Medium

CONTAMINANTS OF CONCERN:
VOCs, Metals

MEDIA OF CONCERN: Soil,
Groundwater

Phases	Start	End
PA	198905	198910
RI/FS	198911	200109
IRA	199709	200109
RA(C)	200103	200109
LTM	201008	204008

RC DATE: 200109

FTSH-08 Landfill # 1

SITE DESCRIPTION

Landfill 1 is located in the northwestern corner of Fort Sheridan within a former branch (Janes Ravine) of the McCormick Ravine and encompasses just over one acre. Approximately 50 percent of the landfill is located on the Army Reserve property (southern portion) with the remaining portion situated on land owned by the City of Lake Forest (northern portion). The landfill was in use from 1940 until the early 1950s.

The Remedial Investigation/Baseline Risk Assessment (RI/BRA) for the DoD OU (including Landfill 1) was completed in 1999. A feasibility study was completed in 2002. The Final PP for Landfill 1, completed in 2004 by the GFPR contractor, proposed the excavation and off-site disposal of the off post portion (City of Lake Forest property) and the capping of the on post portion (similar to that conducted at Landfill 5). The draft DD received a non-concurrence memorandum from the US Army Environmental Center (USAEC) for the off post remedy.

The funding source for the remediation of Landfill 1 had also been in question. Based on a review by the Department of the Army Office of the Judge Advocate, dated 1 July 2003, it was determined that BRAC funds were the appropriate funding source. Funding may not be available until FY08 or FY09.

CLEANUP STRATEGY

BRAC D and USAEC determine suitable remedial response for Landfill 1. GFPR contractor fulfills its contract and complete the DD. Actual remedial response will be managed through the Army Reserves using BRAC funds.

STATUS

REGULATORY DRIVER: CERCLA

RRSE: Low

CONTAMINANTS OF CONCERN:
PAHs, Metals

MEDIA OF CONCERN: Soil

Phases	Start	End
PA	198905	198910
RI/FS	198911	200109
RA(C)	200101	200109
LTM	201108	204108

RC DATE: 200109

IRP No Further Action Sites Summary

AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
FTSH-02	Landfill 2	Study Complete No Cleanup Required	199906
FTSH-03	Landfill 3	Study Complete No Cleanup Required	199710
FTSH-04	Landfill 4	Study Complete No Cleanup Required	199710
FTSH-10	Gasoline USTs, Bldg 208	All required cleanup(s) completed	200308
FTSH-11	Incinerator	Study Complete No Cleanup Required	200109
FTSH-12	Vehicle Storage Area 1	Study Complete No Cleanup Required	199710
FTSH-13	Bldg 43, Furniture Stripping	All Required cleanup(s) completed	199906
FTSH-15	Photo Lab (Bldg 361)	Study Complete No Cleanup Required	200109
FTSH-16	Aircraft Maintenance, Bldg 117	Study Complete No Cleanup Required	199710
FTSH-18	Comp Radioactive Mats Sites- Base Wide	Study Complete No Cleanup Required	199608
FTSH-20	Comp Transformers Base-Wide (124)	Study Complete No Cleanup Required	199206
FTSH-21	Comp Asbestos in Bldgs	All Required cleanup(s) completed	199611
FTSH-22	Ammunition Storage Bldg 171	Study Complete No Cleanup Required	199710
FTSH-23	Impact Areas (L. Michigan)	Study Complete No Cleanup Required	200105
FTSH-24	Old Wastewater Treatment Plant	Study Complete No Cleanup Required	200106
FTSH-25	Drinking Water Treatment Plant Bldg29	Study Complete No Cleanup Required	199705
FTSH-26	Former Hospital Bldg 2	Study Complete No Cleanup Required	199705
FTSH-29	Coal Storage Area 1	Study Complete No Cleanup Required	199710
FTSH-30	USTs – Installation Wide	All Required cleanup(s) completed	200009
FTSH-33	Body Shop-Bldg 216	Study Complete No Cleanup Required	199710
FTSH-34	Septic Tanks-Bldg 912, 129, Beach	Study Complete No Cleanup Required	199710
FTSH-36	O/W Separator, Bldg 51	Study Complete No Cleanup Required	199710

AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
FTSH-37	Gas Mask Testing Area-911	Study Complete No Cleanup Required	199710
FTSH-38	Hazwaste Storage – Bldg 86	Study Complete No Cleanup Required	199710
FTSH-39	Battery Storage Area – Bldg 77	All Required Cleanup Completed	199906
FTSH-40	Small Arms Ranges	Study Complete No Cleanup Required	199906
FTSH-41	Pistol/Machine Gun Range	Study Complete No Cleanup Required	200109
FTSH-42	Trap Range	Study Complete No Cleanup Required	199710
FTSH-43	Acid Pit – Bldg 378	Study Complete No Cleanup Required	200106
FTSH-44	Ammo Burn Area – Beach	Study Complete No Cleanup Required	199809
FTSH-45	Dental Clinic – Bldg 707	Study Complete No Cleanup Required	199705
FTSH-46	Bldg 154 – Pool Maintenance	Study Complete No Cleanup Required	199710
FTSH-47	Vehicle Storage Area 2	Study Complete No Cleanup Required	199710
FTSH-51	Vehicle Storage Area 8	All Required Cleanup Completed	200109
FTSH-52	Coal Storage Area 2	Study Complete No Cleanup Required	199710
FTSH-53	Coal Storage Area 3	All Required cleanup(s) completed	200109
FTSH-54	Coal Storage Area 4	All Required cleanup(s) completed	200109
FTSH-57	Building 173	Study Complete No Cleanup Required	1999710
FTSH-58	Building 377	Study Complete No Cleanup Required	200106
FTSH-59	Ammunition Storage Bldg 57A, B, C	Study Complete No Cleanup Required	199710
FTSH-60	Ammunition Storage Former Bldg 127	Study Complete No Cleanup Required	199710
FTSH-61	Ammunition Storage Bldg 384	Study Complete No Cleanup Required	200106
FTSH-62	Ammunition Storage Bldgs 388-390	Study Complete No Cleanup Required	200106
FTSH-64	Middle/Primary AAA Firing Point	Study Complete No Cleanup Required	199704
FTSH-65	Southern AAA Firing Point	Study Complete No Cleanup Required	199704
FTSH-66	Northern AAA Firing Point	All Required Cleanup Completed	199704
FTSH-67	Haz Mat Storage – Bldg 135	Study Complete No Cleanup Required	199710

AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
FTSH-68	Maintenance Yard – Bldg 368	Study Complete No Cleanup Required	200106
FTSH-69	Pesticide Storage Area – Bldg 70	Study Complete No Cleanup Required	199710
FTSH-70	Disturbed Area	Study Complete No Cleanup Required	199710
FTSH-71	Haz Mat Storage Bldg 42	All Required Cleanup Completed	199906
FTSH-72	Golf Course	Study Complete No Cleanup Required	199604
FTSH-73	AST – Bldg 718	All Required Cleanup Completed	199511
FTSH-74	Gas Mask Training Tent Area	Study Complete No Cleanup Required	199710
FTSH-75	Shenck Ravine Drainage System	Study Complete No Cleanup Required	200109
FTSH-76	Airport Drainage System	Study Complete No Cleanup Required	199906
FTSH-77	Janes Ravine Drainage System	Study Complete No Cleanup Required	199809
FTSH-78	McArthur Loop Drainage System	Study Complete No Cleanup Required	199705
FTSH-79	Hutchinson Ravine Drainage System	Study Complete No Cleanup Required	199809
FTSH-80	Scott Loop Drainage System	Study Complete No Cleanup Required	199705
FTSH-81	Bartlett Ravine Drainage System	Study Complete No Cleanup Required	200109
FTSH-82	Officer Family Housing Drainage System	Study Complete No Cleanup Required	200108
FTSH-83	Van Horne Ravine Drainage System	Study Complete No Cleanup Required	200109
FTSH-84	Comp Lead Based Paint Haz Abatement	All Required Cleanup Completed	199510
FTSH-85	Heating Plant	Study Complete No Cleanup Required	199710
FTSH-86	Vehicle and Equipment Storage Area 3	Study Complete No Cleanup Required	200106
FTSH-87	Vehicle and Equipment Storage Area 7	Study Complete No Cleanup Required	200106
FTSH-90	Building 172	Study Complete No Cleanup Required	199809
FTSH-92	38 Acre Parcel Fill Area	Study Complete No Cleanup Required	199906
FTSH-93	Wells Ravine North Filled Tributary	All Required cleanup(s) completed	200109
FTSH-94	Bartlett Ravine North Filled Tributary	All Required cleanup(s) completed	200109

AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
FTSH-95	Water Towner	All Required cleanup(s) completed	200109

Initiation of IRP: 1989

Past Phase Completion Milestones

1992

- SI – November – FTSH-20

1995

- RA(C) - FTSH-84 (October), FTSH-73 (November)

1996

- SI - FTSH-72 (April), FTSH-18 (August), FTSH-2 (November)
- RI/FS - FTSH-21 (November)

1997

- SI – FTSH-26, 45, 78, 80 (May), FTSH-46, 74 (November)
- RI/FS – FTSH-64, 65 (April), FTSH-25 (May), FTSH-3, 4, 12, 16, 22, 29, 33, 34, 36, 37, 38, 42, 47, 52, 57, 59, 60, 67, 69, 70, 85 (October)
- RA(C) – FTSH-66 (April)

1998

- RI/FS – FTSH-44, 77, 79, 90 (September)

1999

- RI/FS – FTSH-40, 76, 92 (June)
- RA(C) – FTSH-13, 39, 71 (June)

2000

- RA(C) – FTSH-30 (September)

2001

- SI – FTSH-23 (May)
- RI/FS – FTSH-24, 43, 58, 61, 62, 68, 86, 87 (June), FTSH-82 (August), FTSH-11, 15, 41, 75, 81, 83 (September)
- RA(C) – FTSH-51, 53, 54, 93, 94, 95 (September)

2003

- RA(C) – FTSH-10 (August)

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates:

2007(estimated) - Decision Document Landfills 6 and 7

Projected Construction Completion Date of IRP: 2001

Schedule for Next Five-Year Review: 2009

Estimated Completion Date of IRP (including LTM phase): 2041

FORT SHERIDAN IAP SCHEDULE

(Based on current funding)

AEDBR#	PHASE	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
FTSH-05	LTM									203508
FTSH-06	LTM									204008
FTSH-07	LTM									204008
FTSH-08	LTM									204108

Prior Years Funds

Total Funding up to FY05: \$56,666K

Current Year Requirements

**Year Site Information
FY06**

Expenditures

**FY Total
\$ 0**

Total Future Requirements: \$13,469K

Total IR Program Cost (from inception to completion of the IRP): \$70,135K

Fort Sheridan did have a Technical Review Committee (TRC) during FY 00. The purpose of the TRC was to review alternate remedial technologies for the closure of Landfills 6 and 7. A Technical Assistance for Public Participation (TAPP) has not been established for Fort Sheridan.

The Restoration Advisory Board was established for Fort Sheridan in January 1995. RAB membership is approximately 20 people, mostly residents from the surrounding communities. The RAB typically meets on a quarterly basis; however, more recently as needed. During FY96 - 06, RAB meetings have been used to brief the RAB on the status of ER, A IRP investigations as well as all Proposed Plans and Records of Decisions.

Community Relations Plan was published in October 1995.